AMENDMENTS TO THE CLAIMS

1-54. (CANCELLED)

55.   (CURRENTLY AMENDED) An isolated sweet taste receptor comprising a T1R3 polypeptide, wherein the T1R3 polypeptide ~~is encoded by a nucleotide sequence that~~ has at least ~~90% sequence identity~~ 93% amino acid sequence identity to ~~a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 20, 23, or 25~~ SEQ ID NO: 20 or at least 94% amino acid sequence identity to SEQ ID NO:23.

56. (CANCELLED)

57.   (CURRENTLY AMENDED) The isolated receptor of claim 55, wherein the T1R3 polypeptide has an amino acid sequence of SEQ ID NO: ~~20, 23, or 25~~ 20 or 23.

58.   (PREVIOUSLY PRESENTED) The isolated receptor of claim 55, wherein the receptor comprises a T1R3 polypeptide and a heterologous polypeptide.

59.   (PREVIOUSLY PRESENTED) The isolated receptor of claim 58, wherein the T1R3 polypeptide and the heterologous polypeptide are non-covalently linked.

60.   (PREVIOUSLY PRESENTED) The isolated receptor of claim 58, wherein the T1R3 polypeptide and the heterologous polypeptide are covalently linked.

61.   (CURRENTLY AMENDED) The isolated receptor of claim 58, wherein the heterologous polypeptide is a T1R2 polypeptide ~~that is encoded by a nucleotide sequence that~~ has at least ~~90% sequence identity~~ 92% amino acid sequence identity to ~~a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 7 or 8~~ SEQ ID NO: 8.

62.   (CANCELLED)

63.   (CURRENTLY AMENDED) The isolated receptor of ~~claim 62~~ claim 61, wherein the T1R2 polypeptide has an amino acid sequence of ~~SEQ ID NO: 7 or 8~~ SEQ ID NO: 8.

64.   (PREVIOUSLY PRESENTED) The isolated receptor of claim 55, wherein the receptor has G protein coupled receptor activity.

65.   (CURRENTLY AMENDED) The isolated receptor of claim 55, wherein the receptor specifically binds to antibodies raised against SEQ ID NO: ~~20, 23, or 25~~ 20 or 23.

66-88. (CANCELLED)

89. (NEW). The isolated sweet taste receptor of claim 55 comprising a T1R3 polypeptide having an amino acid sequence of SEQ ID NO:20 or SEQ ID NO:23 and a T1R2 polypeptide having an amino acid sequence of SEQ ID NO:8.